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ABSTRACT

The paucity of material dealing with academic programs for the health professions in two-year colleges is reflected in this review of studies and reports which show great variety in their primary focus and in the disciplines involved. Cited in this literature review are: syllabi for courses in anatomy, physiology, and chemistry; a report on biological course prerequisites at a variety of institutions, including those granting nursing, medical technology, and pharmacy degrees; a compilation of conference papers dealing with biomedical education; descriptions of nursing curricula and students; discussions of the aged and aging, death and dying, and student motivation; several studies concerned with ethics in the health professions; and descriptions of interdisciplinary programs. A bibliography is included. (AYC)

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ERIC® JUNIOR COLLEGE RESOURCE REVIEW

December 1978

# ACADEMIC COURSES FOR THE HEALTH PROGRAMS

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ERIC CLEARINGHOUSE FOR JUNIOR COLLEGES
ARTHUR M. COHEN, *Principal Investigator and Director*

ERIC® JUNIOR COLLEGE RESOURCE REVIEW

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# ACADEMIC COURSES FOR THE HEALTH PROGRAMS

Searching the literature for reports on academic courses for health professionals is a bit like going back into time. During the 1960s, very little was written specifically about two-year colleges; Blocker, Plummer and Richardson's *The Two-Year College: A Social Synthesis* (1965), Cohen's *Dateline '79: Heretical Concepts for the Community College* (1969), and Thornton's *The Community Junior College* (1966) stand out like oases in a barren desert. Aside from these books, material about the community/junior college was typically published in the literature of four-year colleges and universities.

Since the early 1970s, the literature has swelled. Reports have been written about students, faculty, fiscal matters, and governance — to an extent sufficient that this facet of education can now claim a respectable literary base. When it comes to matters of curriculum and, especially, to academic courses in technological programs, however, the material is still sparse. Our search of the ERIC files netted very few titles, and other data bases also are notable for their significant omissions.

At the same time, strong ties are evident between courses that are very much in the mainstream of the liberal arts and certain technical fields — particularly allied health programs. With the exception of an occasional journal and the studies of humanities and science curriculums currently being conducted by the Center for the Study of Community Colleges, little attention is being paid to these issues. Yet, their significance suggests that this is, indeed, a fertile area for study.

The few publications that do pertain to academic courses in technology programs for health professionals serve to introduce this *Junior College Resource Review*. While all these reports deal with some aspect of training for health professionals, they differ in terms of their primary focus or the disciplines involved. For example, syllabi for career courses in allied health were developed in the fields of human anatomy and physiology (Cohen, 1976). For both a one- and a two-semester course, one syllabus, designed for the two-semester course, fulfilled the basic human biology requirements of students enrolled in the two-year allied health career program. The other syllabus was devised for a condensed one-semester course for students who were enrolled in the shorter, one-year program. Each syllabus includes institutional objectives for each semester as well as a topic outline that is organized into units, with each unit terminating in a prescribed laboratory experience.

Other aspects of the biological sciences are stressed in two other reports, one of which provides data resulting from a survey and the other presents papers delivered at a conference. The National Science Foundation's Commission on Undergraduate Education in the Biological Sciences (Roos, 1969) reports findings from a questionnaire sent to all medical, dental, veterinary, and public health schools in the United States, as well as to selected degree-granting schools of nursing, medical technology, and pharmacy. Important to our concerns with two-year colleges are the data reported about the types of biological prerequisites for each school and the role of preparatory courses in graduate admission policies.

A number of papers emanating from a British conference on the biological sciences in advanced further education are compiled in another report (Coombe Lodge Report, 1975), which is of peripheral interest to two-year college curriculum designers. Although the majority of these papers deal with areas unrelated to community/junior colleges, three issues covered are pertinent and of potential usefulness: a review of the range of courses and qualifications in the advanced biomedical sector, the factors affecting biological teaching in the face of limited resources, and the ways that biology departments could respond to a call to assume wider responsibility for paramedical training.

Brief discussions of the academic curriculum as it relates to nursing education are also of interest. One study of ten nursing programs in six states reported that all of the ten nursing programs surveyed in six states combined nursing courses with some supportive college courses (Blackstone, 1974). Recommendations for additional courses in mathematics and bio-chemistry and for in-class teaching

techniques were offered as a result of a follow-up survey administered to graduates of South Georgia College's Division of Nursing (Kondwros, [1977]).

The concerns with the aged and aging that are now so frequently manifested were also found in our search of pertinent material. Pensacola Junior College (Florida), developed three general categories of involvement in educational programs for the aging, one of which, the Para-Professional Gerontology Program, is particularly relevant to our concerns here. Special seminars on the aged, greater emphasis on existing nursing courses that deal with older people, a two-year associate degree, and certificated programs in geriatric care were urged (Tamburello, 1975). Courses in the counseling and psychology of the aged were also emphasized. How much academic content prevails in these courses or programs is presently unknown, but surely a considerable amount could be incorporated in almost any paramedical training for the aged.

Closely related to concerns for the aged are courses that deal with death and dying, developed for people in various paramedical programs. Counselors, teachers, nurses, doctors, clergy and social workers — as well as their aides — could put to good use courses in thanatology, whether offered from the standpoint of anthropology, physiology, sociology, or psychology. Crosbie and Garlie (1976) address some of these concerns and review the literature on the current state of training for health professionals and on their attempts to cope with death and dying.

The scope of ethics in family practice medicine — including values and other philosophical questions — is related by Keller (1977), who cites six educational objectives as well as the precise instructional methods that form the basis of our ethics/human values curriculum in one medical school. The emphasis here is obviously on a program that is only peripherally related to the two-year colleges — paramedical training — but in an indirect way, the material included is of potential usefulness.

A similar situation applies to a study by Hendrix (1977). Data from questionnaires mailed to every college and university in the United States ascertained that 26 percent of the 223 responding major institutions offered a bio-ethics course. Presented most frequently by the biology department, this was generally taught by professors of ethics and philosophy. Roush's (1976) report of medical anthropology in the curriculum is also pertinent to paramedical programs in two-year colleges.

Moving from medical and paramedical students to nursing students in particular, a report by Aroskar (1977) suggests that while most of the educators surveyed by her supported the teaching of ethics for nursing students, few programs provided a planned curriculum that includes such a course. Suggestions for implementing curriculum changes to incorporate this are noted.

Nursing students are also the target population for an introductory chemistry course described by Jones (1976), while a science program at Catonsville Community College (Maryland) was developed for nursing and other paramedical students (Zubairi, 1973). This program recognizes and attempts to remedy the weak science backgrounds of many students who are training for paramedical careers.

Moving into another sphere of concern, we note that problems centering around motivating students to learn are probably as old as man himself. One way of dealing with this concern has been developed in an effort to bring allied health students to college level reading abilities. Based on the theory that adult learners will be more motivated to improve their reading skills if the reading materials assigned them related to career preparation, a Science Reading Program was designed, implemented, and evaluated (Beitler, 1976). Students enrolled in this program were first tested for reading level ability and programmed instruction, utilizing service related materials, was then developed for each person.

Less specific than such prescribed programs but of growing interest in many colleges are interdisciplinary courses. In the studies of the humanities curriculum in two-year colleges that are currently being conducted by the Center for the Study of Community Colleges (Cohen and Brawer, 1977), interdisciplinary courses have been found to be among the few humanities courses that show increasing enrollments (Cantor, 1978). Yet, only three references to such courses were found in our search of academic programs for the health professions. An interdisciplinary approach to family health care emphasizes the principles and procedures of team development, stressing group dynamics and communication processes (Sumner and Others, 1978). The development of an interdisciplinary course and practicum for social workers and nursing students stressed the need for collaboration among health care professionals in several fields (Rusnack, 1977). Although the difficulties in implementing such a program are rampant, the results could be significant.

The development, content, and emphases in an interdisciplinary course called "Science and Society," offered at Central Piedmont Community College in North Carolina, were described by McAlexander (1976). This course, which offers credit in either science (with laboratory experiences) or humanities (without such a requirement), deals with the role of science and technology in events that have shaped the past, and with their roles in providing alternative futures. Its objectives are to make students more scientifically literate, have them learn about the role of science as a cultural influ-

ence, and encourage them to observe the trends of our post-industrial society and extrapolate its future. These goals, which say something to all students, certainly are pertinent to those engaged in allied health programs.

Earlier, this review noted the paucity of material dealing with academic programs for the health professions. One study appears here; another report, there. The haphazard nature of this literature is interesting, particularly in view of the numbers of students who are enrolled in health technology programs. Certainly many of those students would be better served if they were exposed to a broader curriculum than that which they now face, a curriculum that is founded on the principles that since health professionals are dealing with people in some capacity or another, they must understand themselves and their constituents from several perspectives. Integration of selected courses from the liberal arts into allied health programs can help supply some of this understanding.

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Staff Writer

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*The Personal Liability of Community College Officials.* Topical Paper No. 61. Deborah Crandall. Apr 1977.

*Increasing Productivity in the Community College.* Topical Paper No. 67. Gregory Goodwin and James C. Young. Jul 1978.

*The New Generation Gap: Involvement Vs. Instant Information.* Topical Paper No. 64. Walter E. Hunter and Louise S. McCants. Dec 1977.

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